

YEAGER GRIST MILL  
Mill Road  
off Main Street  
Yeagertown  
Mifflin County  
Pennsylvania

HAER No. PA-185

HAER  
PA  
44-YEATO,  
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD  
Mid- Atlantic Region  
National Park Service  
Department of the Interior  
Philadelphia, Pennsylvania 19106

HAER  
PA  
44-YEATO,  
1-

HISTORIC AMERICAN ENGINEERING RECORD

YEAGER GRIST MILL

HAER No. PA-185

Location: Mill Road, off Main Street,  
Yeagertown  
Mifflin County  
Pennsylvania

USGS UTM coordinates: 18.281900.4501999  
Quad name: Burnham, PA

Builder: Jeremiah Yeager, primary builder

Date of Construction: Existing building, 1857. Replaced a mill built  
in 1792, demolished in 1857.

Present Owner: Township of Derry  
Mill Road  
Yeagertown  
Mifflin County  
Pennsylvania

Present Use: Vacant-last used in 1963.

Significance: The building is over 100 years old. It is  
important to local history for the role which it  
played in the local economy.

Project Information: The documentation was undertaken during 1991 in  
accordance with the Memorandum of Agreement with  
the Mifflin County Planning Commission, prior to  
the demolition of the mill building. Demolition  
of this structure has been approved by the PA  
Historic and Museum Commission as rehabilitation  
is not feasible.

Allison L. Fisher  
Mifflin County Planning Office  
20 N. Wayne St.  
Courthouse  
Lewistown, PA 17044

## HISTORY

The Yeager Mill has a long and colorful history. The land on which the mill stands was purchased from the Iroquois in July 1754, by the Penns'. In 1755 this piece of land was part of a large tract warranted to a Mr. Everhart Martin. Martin left his estate to his son Christopher. Christopher erected a saw and grist mill on the east side of the Kishacoquillas Creek about 1792. Christopher Martin sold 86 acres to George Hanawalt on July 14, 1795. Hanawalt, on January 6, 1796 sold the property to James Mayes. Mayes had warranted 250 acres adjoining this land in 1790 and 15 more acres in 1793. By 1798 he was assessed for 588 acres, a saw mill and a grist mill. His operation was known as the Mayes Grist Mill.<sup>1</sup> On May 7, 1806 James Mayes conveyed the mill property to Philip Dail. Dail then conveyed the property to Robert Forsythe in 1810. Forsythe operated the mill until his death in 1824. Forsythe's heirs held it for several years and operated it as Campbell and Oliver. In 1839 John Oliver came into possession of the mill. In 1842 Jacob Yeager came from Dauphin County and purchased 50 acres and the mill from John Oliver, Jr. In the same year, one of the largest newsworthy items was the "religious awakening known as the Great Methodist Revival."<sup>2</sup> Yeagertown, not yet named such, was not more than a collection of homes nestled at the base of Jack's Mountain in the Mann Narrows. In later years, the railroad and the

---

<sup>1</sup>Judy and Skip Headings. Yeagertown, PA. 1986, p. 3.

<sup>2</sup>Historical Souvenir of Lewistown, PA, published by the Sentinel Co. for Commemoration Week, 1925, chronology page.

turnpike would run through the town, bringing in much business.

1857, the old mill which had stood for more than 60 years, was torn down and a new mill was erected with Jeremiah M. Yeager (son of Jacob) as miller and proprietor, (See Photo 1). By 1879, Yeagertown had two stores, "one of the best mills in the state", one church, two schools, and "the usual mechanics of a country village, in a healthy prosperous condition."<sup>3</sup> The combination of plentiful natural resources, transportation, and a strong water supply all united to make the Yeager Mill a profitable enterprise. The flour produced in the mill was well-known for its fine quality, (See Photo 2).

J.M. Yeager's son Jessie Orrin added lumber and coal to the Yeager Mill business, (See Photo 3). J.M. Yeager ran the mill until his death on December 30, 1906, upon which time the operation passed to his youngest son, Jessie Orrin Yeager.

Around the turn of the century, a "small but very substantial and up-to-date" power plant was constructed at the mill, (See Photo 4). It had four turbine wheels of 500 horsepower which drove two 150 kilowatt generators. The Mifflin County Gas and Electric Company leased the power of the plant.<sup>4</sup> By 1908, it generated enough electricity for all of Yeagertown.<sup>5</sup>

The business prospered until 1917 when Yeager refused to compromise the

---

<sup>3</sup>Joseph Cochran. History of Mifflin County. Harrisburg, PA: Patriot Publishing Co., 1879, p. 267.

<sup>4</sup>HJ Fosnot. Lewistown: descriptive of a progressive central city of PA, of its possessions and prospects, its advantages and opportunities. The Sentinel Publishing House: Lewistown, PA, 1909, p. 29.

<sup>5</sup>Headings, p. 3.

quality of his product. During World War I manufacturers were supposed to dilute their flour with potato flour or something similar, often sawdust. However, the Yeagers were extremely proud of their whole-wheat flour. They used the whole kernel and the product was famous for its excellence. Their Alfarata and Juniata's Queen Flour were shipped to large hotels all over this country and to South America. So when two men appeared one day in 1917, demanding to inspect the manufacturing process, Mr. Yeager refused to divulge any information about his mill process. However, the men soon identified themselves as secret service agents sent by Herbert Hoover, then head of the food administration, and informed Yeager that he was in violation of the law and thus subject to a fine. Yeager replied, "I have enough grain in the bins for about three weeks. Let me use that and I will close the mill." He did just that; Alfarata Straight Patent Entire Wheat Flour was never made again, (See Figure A).

While the flour was never made again, J. Orrin Yeager continued other mill business until his death in 1941 at which point G. Clifford Rice, a nephew, then came into possession of the business. Rice moved into building supplies and coal and eventually closed the doors for all times on May 23, 1963.

The building was bought by Jerry Tate on July 26, 1974 for \$7,500 from Naomi Stever, acting as agent for the J.M. Yeager estate. Tate sold the mill on July 15, 1990 for \$15,000 to Derry Township, the present owners. It is presently in a severely deteriorated state, (See photo 5).

YEAGER GRIST MILL  
HAER No. PA-185 (page 5)

LAYOUT

The Yeager Mill is situated on a parcel of land along which runs the Kish Creek, by whose power the mill operated. The mill was constructed by Jeremiah Yeager around 1857 and is standard post and beam construction. It is all wooden with 12 inch square posts and 12 foot beams, made of white oak, providing the support, (See photo 6). The exterior is wood siding made of pine and the roof is composition shingles. At this time the roof is severely deteriorated with large holes in it, causing damage to the interior as well. The floor is 1 by 4 inch plank, typical of the construction of the time.

The building itself is a four and 1/2 and a three and 1/2 story frame structure with a basement area. The building has a total square footage of approximately 14,670 sq. ft. According to a representative from the Pennsylvania Historical and Museum Commission, the original section of the mill, built in the 1850's, is typical of the Oliver Evans style mills, on the first two floors. The addition, which was added around 1892 by Griscom and Co. and McFeely of Philadelphia, reflects roller mill technology.<sup>6</sup> The mill operated with an undershot water wheel, in a manner known as a "tub" mill, (See photo 7).

CONSTRUCTION

As stated previously, the Yeager Mill, built in 1857, was constructed on the site of a much older mill. The Yeager family, also involved in the lumber

---

<sup>6</sup>From Marcia Swartzell, descendant of Jeremiah Yeager.

business, built the mill themselves.<sup>7</sup> The mill is similar to Oliver Evans in operation and may have been so influenced. In 1892 an addition was constructed by Griscom and Co. and McFeely of Philadelphia. In the early 1900's a power station, which provided electricity for the village of Yeagertown, was built on the mill property. At this point, electricity was installed in the mill, as well, and it ceased to be powered by the waterwheel.

#### ASSOCIATED INDIVIDUALS

There is no recorded information of specific individuals, outside of the Yeager family, who were involved with the mill. The Yeagers built and operated the mill, except that the 1892 addition was constructed by Griscom and Co. and McFeely of Philadelphia.

#### TECHNOLOGY

There is no recorded information describing the technology used in the Yeager Mill. However, there is still machinery left in the mill and it includes:

Bolter: The mill had several of these machines which sifted flour.

Combined monarch corn and cob outfit: This machine was responsible for shelling and separating the corn in the process of making corn meal.

Roller mill: The mill had 2 or 3 of these machines which ground the

---

<sup>7</sup>Conversation with Mrs. G.C. Rice III, of the Yeager family, August 14, 1991.

flour. This machine put out 25 barrels of flour a day. An "automatic" machine, it was regulated by the speed of the roll mechanism. The lack of belts meant that nothing interfered with the uniformity of the feeding.

Robinson Triplet fan purifier: This machine sifted the flour and took the chaff out.

Sifters: The Yeager Mill had three of these which sifted flour. The flour would come into the sifter bin and a "worm" (wooden gear) took it out onto a conveyor, (See Photo 8).

Sieve Scalper: This machine is constructed of a flat incline sieve or screen, hung inside of a frame to which the sieve or screen is imparted by the up and down movement by means of two cams running on a cross shaft. The screen or sieve was adjustable at each of its four corners by means of a wedge, each corner being adjusted independent of the others. Underneath the sieve was placed a traveling brush for the purpose of cleaning the wire or cloth. The feed consists of a fluted roll running in the hopper. The scalper was used to separate and drytail the flour and middlings.

Grain Hull Remover: The mill contained at least one of these machines for removal of hull, (See photo 8).

See pages 19-22 for additional photos of machinery.

The labor force, from family accounts, seems to have been from the Mifflin County area.



### OPERATION

The structure was used, from the time it was built until 1917, as a grist mill. However, the Yeager family was involved in various businesses, such as insurance, coal, lumber, structural iron, fancy glass, building supplies, and hay and feed and the building served as a base for many of these business efforts. For instance, J.M. Yeager had a patent on an incubator which he had constructed on the top floor of the mill and then sold to customers. They also constructed the barrels in which they shipped their flour. A barrel, made with Yeager lumber, would travel on a conveyor to a worker. A paper bag had been placed in the barrel previously and the worker would open a chute, fill it with flour, weigh it and put on the lid. The nails which held down the lid, often supplied by York Tack and Nail Works, were the only part of the process not manufactured by the Yeagers.

Mills typical of the Oliver Evans' process were equipped with: an elevator, an endless band with sheet metal buckets spaced a foot apart, to lift the grain from ground to grain loft, from which it was fed down to the millstones; a hopper boy, a twelve-foot revolving rake that spread the ground meal evenly on the loft floor, cooling it and guiding it to a central chute over the hopper that passed it to the bolter; and the conveyor, an auger of sheet iron wound spirally around a wooden shaft encased in a wooden trough, which carried unground grain horizontally through the mill, cleaning it with a fan as it moved.<sup>8</sup> Early millers had hauled their grain up

---

<sup>8</sup>The following discussion of Oliver Evans' style mills is taken from Janice Tyrwhitt. The Mill. Boston: New York Graphic Society, 1976, pp. 139 - 146.

on rope pulleys by hand or by water-driven hoists which took power away from the grindstones. The elevators which Evans designed allowed for a light, continuous flow of power along with smooth grinding. Evans' process combined conveyors, chutes, screws, and movable crane spouts to carry grain from process to process, allowing for a more streamlined operation.

This process produced a very fine flour. Water power cleaned the grain several times, then air was blown through it as it was unloaded. Next it was run through stones widely set so that they rubbed without grinding, then through a double cylinder of two revolving wire sieves that screened out dirt and chaff. With bolters the fine flour was separated from the middlings, which would then be reground, running the millstones slowly. This method produced an average of 64 percent fine flour.

According to Vance Packard, Chief of Divisions of Industrial Sites of the Pennsylvania Historical and Museum Commission, the Yeager Mill is an example of "the latter Oliver Evans style mills on the first two floors. The addition...reflects roller mill technology."<sup>9</sup> While the hopper boy is no longer in the mill, there are other features of the mill which allow Mr. Packard to make such a statement.

Mills built prior to Oliver Evans 1802 publication in the Young Millwright's Guide, generally had no floor beneath the grinding stones, no elevator system, and made little, if any attempt at purification. The Yeager

---

<sup>9</sup>Vance Packard, letter dated 6/19/1990 to Michael Cabot.

Grist Mill does contain a floor beneath the former grinding stone area. It also includes an elaborate elevator system which carried grain as well as assisted in the purifying method.

#### SIGNIFICANT EVENTS

While the Yeager Mill is not unique in its architecture, it is still a fine example of craftwork. Vance Packard stated that the main frame of the original section of the mill "represents the highest quality" mill work. It is also of significance to local history due to its long record of contribution to the local economy. There has been a mill on the site ever since 1792.

SOURCES

Atlas of Perry, Juniata, and Mifflin Counties. Pomeroy, Whitman and Co.: Philadelphia, 1877.

Cochran, Joseph. History of Mifflin County. Patriot Publishing Co.: Harrisburg, PA, 1879.

Commemorative Biographical Encyclopedia of the Juniata Valley, comprising the Counties of Huntingdon, Mifflin, Juniata, and Perry PA. JM Runk and Co, Pub.: Chambersburg, PA, 1897.

Conversation with Mrs. G.C. Rice III, Yeager family, August 14, 1991.

Conversations with Mr. Gilbert Shirk, former Yeager Mill employee, summer 1991.

Conversation with Marcia Swartzell, descendant of Jeremiah Yeager, August 15, 1991.

Fosnot, HJ. Lewistown: descriptive of a progressive central city of PA, of its possessions and prospects, its advantages and opportunities. The Sentinel Publishing House: Lewistown, PA, 1909.

Headings, Judy and Skip. Yeagertown, PA. 1986.

Historical Souvenir of Lewistown, PA. Sentinel Co: Lewistown, PA, 1925.

The Sentinel, Saturday April 26, 1969, "Flour Sacks of one-time Yeager Mills decorate Denver Hilton".

Packard, Vance. Letter dated June 19, 1990 in reference to Yeager Grist Mill and Oliver Evans style.

Tyrwhitt, Janice. The Mill. NY Graphic Society: Boston, 1976.

YEAGER GRIST MILL  
HAER No. PA-185 (page 12)

APPENDIX  
PHOTOS AND DRAWINGS  
(see field notes)